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AUTO-FOLDER TYPE MOBILE PHONE

Abstract

Disclosed is a folder driving device for an auto-folder type mobile phone.

The disclosed auto-folder type mobile phone includes: fixed members formed at one end of a phone body; a hinge member formed at one end of a folder, and hingably supported by the fixed members; power generating means fixedly mounted in the hinge member, and adapted to generate a drive force; a coupler connected to the power generating means so as to be rotatable; a housing fitted in one of the fixed members; a cam assembly including a hinge shaft slidably received in the housing, and adapted to receive a rotating force from the coupler, a hinge cam received in the housing while having an end selectively engagable with an end of the hinge shaft, and elastic means received in the housing, and adapted to apply an elastic force to the cam, thereby selectively stopping rotation of the hinge cam, and, thus, releasing the engagement of the hinge cam; a

signal input unit provided at one side surface of the phone body, and adapted to input an operating signal to the power generating means; and position sensing means installed at a position corresponding to a predetermined position of each of the coupler and hinge member, and adapted to apply a control signal to the power generating means when the positions have the same phase. The invention has an object to achieve miniaturization without increasing the length and diameter of the hinge member, while preventing the elastic force of the elastic means from being transmitted to the power transmission means and power generating means.